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Neurasthenia.

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Neurasthenia, a condition producing functional disturbances in certain portions of the cerebro-spinal nervous system. In those who are of neurotic tendencies and liable to the affection, there is probably a lack of persistency in the stability of the nucleus of the cells found in the brain and spinal cord.

This nervous instability may be transmitted. The image of the parents is always found in the crude protoplasm out of which the offspring appears. The parental image is the architect which builds up the nervous and mental fabric of the child. The neurasthenic condition develops at puberty or before the middle period of life. The disease is most frequently found among the better classes of society. Its causes are hereditary taint, typhoid fever, shock and other severe forms of sickness; excessive sexual excitement, seminal losses, masturbation, marital excesses, mental strain and business worry.

Neurasthenic patients are easily fatigued, and over exertion produces a feeling of malaise. If they perform the usual amount of labor that others are capable of doing, they are sick.

The most reliable symptoms of the disease are irritability, neuralgic pains, insomnia and muscular weakness. After the neurasthenic condition has been acquired, the exhausted condition of the nervous ganglia is usually first manifested in an enfeeblement of the ocular muscles. Constant use of the eyes produces a feeling of worry. The muscles lose their equilibrium, and the patient applies to the specialist for help, but glasses afford no relief. The use of the eyes is limited, and if forced to do continuous work there is discomfort and pain.

In a country like ours, where there is such rivalry in business interests, and where money is regarded as the chief good, the brain is liable to be overworked, and neurasthenia of the brain is the result. The psychical faculties are affected; intelligence may be preserved, but memory and judgment may be defective with a loss of will-power. The capacity for intellectual labor is diminished. The man is incapable of continuing business pursuits without danger of becoming a mental wreck. In neurasthenia of the brain, the central control may be lost; then life is a discord.

Morbid sensations appear in the sensory area of the brain from the sensory portions of the body. Each of the vicera has its representative area in the brain, just as the arm or leg is represented in a distinct and localized area.

The neurasthenic person feels his sensations in the part to which he refers them, just as other sensations are experienced which are unreal. The lunatic is not the only person who has what others regard as hallucinations. What each one feels is known only to himself.

Morbid sensations may not put life in danger, but they cause great anxiety to the patient by making him think he has some organic change which may lead to insanity.

If we have neurasthenia of the upper portion of the cervical cord, owing to its relations with the pneumogastrics and with the inferior cervical ganglia of the sympathetic nerves, we may have dyspnœa, dyspepsia, gastralgia, quickened action of the heart, accompanied by palpitations, irregularities and their consequences.

In neurasthenia of the dorsal ganglia, owing to its relations with the solar plexus of the sympathetic, we may have visceralgia, flatulency, constipation and intestinal indigestion. If we have the waist-band feeling, it will indicate the exact portion of the dorsal ganglia affected. In attributing the waist-band feeling to neurasthenia, I am well aware of the fact that it is a symptom that properly belongs to the first stage of locomotor ataxy; but I believe that we may have the waist-band feeling in neurasthenia without the disturbance of the deep reflexes which properly belongs to locomotor ataxy. The irritation in the sensory nerves in both neurasthenia and locomotor ataxy in the dorsal region is transverse, the irritation passing from the center to the periphery, the difference being in cause and not effect, in the one case being due to a sclerosis and in the other to molecular debility.

The importance of a thorough knowledge of the affections of the lumbar ganglia of the cord cannot be overestimated. It is this portion of the cord where diseases are most likely to be misinterpreted. The lumbar region is peculiarly liable to exhaustion, for it has a double duty to perform. It is not only a general conductor of impulses to and from the brain, but has been called a little brain in itself, inasmuch as it is an independent generator of special reflex impulses affecting the generative organs and lower portions of the body, reflecting motor stimuli to the muscular and mucous tissues of the pelvis and lower extremities. The muscles in the back are very sensitive to changes of the weather and exposures, and from their extreme sensibility are liable to disturbances when exhausted. Such affections are classed as muscular rheumatism or lumbago.

The irritation of the lumbar ganglia of neurasthenia is the result of exhaustion or some neurotic condition of the system. Neurasthenia is not as profound in its manifestations as locomotor ataxy, yet the sensory symptoms in many respects are similar.

When we have neurasthenia of the lumbar region, the hyperæsthesia is vertical, passing down into the sacral plexus, sciatic nerves, pelvic plexus, vesicle plexus, prostatic plexus and the uterine nerves in the female. The reflexes are but slightly impaired. There is a slight loss of the deep muscular reflex, but the skin reflex is more pronounced than in health.

The symptoms to account for in neurasthenia are hyperæsthesia and the loss of muscular endurance. The hyperæsthesia points to defective nutrition in the posterior nerve roots and posterior columns of the cord. The posterior spinal artery arises from the vertebral artery at the side of the medulla oblongata; passing down on the posterior aspect of the cord, it descends on either side, lying behind the posterior root of the spinal nerves. The artery divides at the second lumbar segment of the cord, where it is broken up and passes down to the cauda equina. It is supposed that the anatomical arrangement of the blood supply to the posterior nerve root in the lumbar segment is somewhat defective. This, perhaps, is a wise arrangement, as pain is a signal of danger. In the neurasthenic condition the vaso-motor system of vessels are liable to contractions and dilitations. We may have blood stasis in one portion and ischæmia in another at the same time — that is to say, we may have in one portion of minute structure of the brain and cord, congestion, and in some other part anemia, either of which cause hyperæsthesia. In order to understand the muscular weakness, we have to understand that it is through the nervous system we talk, walk, feel, see, hear and think, and we have to understand the relation of the peripheral nerves to the muscles. The nerves distributed to the muscles have nerve endings which have a structural continuity with the muscles themselves.

The nerves and muscles are related by molecular contact similar to that which exists in all the tissues. The molecular nutrition of the muscles is determined by the molecular action of the nerves. Disturbances of nutrition of the tissues is the result of molecular changes in nerve trunks and nerve cells. In neurasthenia the molecular action of both cells and fibers is enfeebled, and this enfeeblement must be shared by the muscular structure. The irritation descends from

the nerve fibers to the muscles, and produces the feeling of exhaustion in the muscles, of which we so often hear patients complain.

In neurasthenia there may be plenty of fat, the adipose tissue may be sufficiently fed, but the nervous tissue starved and the muscles flabby and illfed. In such cases the digestion of starch and fat is normal, but there is poor assimilation of albuminoids. There is impairment of the ability to construct lecethin, which contains phosphorus and nitrogen. Lecethin is a conspicuous component of the brain and nervous system. Foster says: "The well-known association betwixt heavy seminal expenditures and the loss of nervous energy is thus intelligible and comprehensible."

Just as the complex hæmoglobin is a constituent factor of the red corpuscles, so this complex structure — lecethin — is a constituent factor of nerve cells and fibers, and should not be wasted in useless expenditures.

It is impossible to know all the subtle changes which lie at the foundation of the loss of nervous energy, but it seems to be linked with an insufficiency of lecethin. The lecethin is used up by overwork or worry, or is improperly formed from some impairment of the assimilative function. Lecethin is the food of the nervous tissue, and the nervous energy cannot be maintained without it. The serous fluids, including the serum of the blood, contain lecethin in small quantities, therefore exhaustion of this substance in the nervous system is easy, but would require time for its repair; and if the nervous system is still called upon, it must furnish evidences of exhaustion and diminished capacity until the normal proportion of lecethin is restored.

In the treatment of neurasthenia it must be remembered that the disease is not the result of specific infection which produces structural and organic change, but the result of an altered molecular action from lowered nervous tone.

Rest for the nervous system and a proper diet permits the reaccumulation of lecethin. The medical treatment should embrace some forms of phosphorus. The prescription I have used most frequently contains phosphide of zinc and nux vomica — one-tenth grain phosphide of zinc and one-third grain nux vomica, mixed in a pill or capsule, to be used three times a day.

For quieting the nervous irritation, I use one-fourth grain cocaine hypodermatically at night. It restores lost tone and prevents neuralgic pains. I also use a mild galvanic current every other day. The sensations caused from the feeble functions of the cells in the posterior lobes of the cerebral hemispheres are best relieved by stimulants. Wine improves the circulation through the brain and relieves the depression. The psalmist says "that wine maketh glad the heart of man."

The diet of fish, white meat, eggs and milk will feed the starved brain structure when liberal meals of meat fail to do so.

In neurasthenia the medical man must inspire confidence in the patient, and carry him to the restoration of health. It will not do in this class of patients to speak with distrust. The enthusiast will cure a case of neurasthenia where the nihilist in medicine fails. The therapeutic nihilist, who doubts the efficacy of his drugs, decries that which he does not understand, and confessedly takes his patient's money under false pretenses.

What Shall We Do With Our Cancer Cases?

Read before a joint meeting of the State Line and Republican Valley Medical Societies at Superior, Neb., July 14, 1892.

By DR. B. B. DAVIS, McCook, Neb.

In choosing this subject, I was not inspired by pride in my own achievements, but it was suggested because of the generally unsatisfactory results obtained.

My attention has been turned to a more careful study of cancer the past few months, with the hope that I can so modify my methods as to lower my mortality below 100 per cent. That is a humiliating confession to be obliged to make, but I cannot recall a case of undoubted cancer I have operated upon which did not eventually succumb to the disease. It is therefore with a feeling not

of jubilation but of defeat that I appear before you to-day.

In his "Morton Lecture," 1889, Sir Spencer Wells says: "The increase in the number of deaths from cancer is now and has been for many years past greater than the proportional increase of population."

In substantiation of this alarming statement he then gives a series of statistics of the mortality from cancer from year to year in Great Britain. This shows a steady increase from 1861 to 1887.

In 1861 in England there were 360 deaths from cancer to each million of population. In 1871 this had increased to 423 to each million. In 1881 it was 520; in 1887, 606.

In Ireland in 1877 there were 350 deaths from cancer to each million of living population. In 1887 the figure had reached 430. He gives all the intervening years in both instances, but as they merely show a gradual increase from year to year, I will not weary this society with the figures.

The total number of deaths from cancer in England and Wales in 1877 was 12,061; in 1887, 17,113. In Ireland in 1877 the total number of deaths was 1,873; in 1887 it had reached 2,067. This shows an increase of the annual death rate from cancer of nearly 200. These dates correspond to an actual diminution of the population of Ireland of nearly half a million.

Dr. Fordyce Barker stated that the mortality from cancer in the city of New York in 1875 was 400 to each million of living population, and that in 1885 it had increased to 530 to the million.

This makes an actual increase of 32½ per cent. in ten years.

In commenting upon these remarkable figures, Dr. Barker says: "It (cancer) causes the greatest proportion of deaths where there is the greatest proportion of people of advanced age—that is to say, in the New England States. Hence, in any given locality, a large proportion of deaths from cancer indicates to a certain extent that the locality is a healthy and long-settled one, and has a large proportion of inhabitants of advanced age.

If this explained it all, it would not seem so bad—for all must die, though few would choose the cancer route—but the registrar general of England, in analyzing his tables, uses the following words: "These characteristic features of cancer mortality is not its increase with advance of years, for this it shares with other fatal affections, but its disproportionate increase in the middle periods of life."

No doubt some of this increase may safely be ascribed to more accurate diagnosis and more careful registration.

But that could hardly account for all of it; the increase has been so regular from year to year. In this country little reliance can be placed in statistics, our registration laws are so variable—Nebraska has none whatever—and so loosely enforced. But in England everything is so systematized that the figures are fairly accurate.

CAUSES.—As yet we are in the dark as to the real underlying cause of cancer. Why a certain tissue of a certain man takes on a cancerous process and finally vanquishes the victim is still conjectural.

The microbic theory has been urged with eloquence and with reason, (and that is generally conceded to be the most plausible theory,) but thus far the germ has eluded the most careful search of the most painstaking pathologists.

From time to time announcements have been made that a germ had been found, but each time the medical world has been disappointed.

Certain things seem to be exciting causes. All of them evidently produce a lowered vitality of the tissues. The time of life that cancers usually make their appearance is just as the downward slope of the hill begins; when the bodily functions begin to decline in vigor never so little. Traumatisms at this time of life mean a great deal more than they did a few years before. *Constant irritation* is a cause—as in smokers, cancer of the lip and tongue; moles of the face are rubbed by the hand, become irritated, and epithelomia results; habitual users of rich and irritating foods are often victims of gastric cancer; coal miners are subject to cancer of the scrotum; uteri affected with catarrh

and cervices which have been lacerated are more prone to cancer than those free from such irritations; fissured nipples are often the starting point of mammary carcinoma. Cancers of the breast are also frequently supposed to be due to mastitis. Although it cannot be denied that heredity plays a part in the etiology of carcinoma, it does not hold nearly as prominent a place among the causative agents as was formerly supposed.

With our present knowledge of the causes, can anything be done in the way of prophylaxis? I fear very little. If we could say to the public, You must not rub, scratch and irritate that mole, but have it removed now before it has time to degenerate; you must not smoke a short pipe; you must eat only mild, unirritating and easily-digested foods; you must have all your lacerated cervices stiched and uterine catarrhs cured; and so on through the list, and the public were so unlike what it is as to heed us, much might be accomplished in the way of prevention. But the millennium has not come yet, and if we are able to raise our voices in only a small way, and be the means of getting people into the habit of consulting their physician early when any suspicious condition arises, we shall be doing a great deal.

The treatment of cancer is purely surgical. Medical treatment has at present no place. Various therapeutic agents have been vaunted as having a specific control of the disease, but aside from keeping the general health up to the highest point by good hygiene, nourishing diet and tonics, our only hope is in caustics or the knife. Just a word about caustics and I am done. They have been used by charlatans to such an extent that the general public often looks for that treatment instead of the knife. It has been claimed that arsenious acid paste and some other destructive agents attack the cancerous tissue; or, in other words, as the layman expresses it, destroy the "roots of the disease." To a limited degree this is true. The cancerous tissue being of so much lower organization than the normal tissues of the body, is more easily destroyed by powerful caustics, but the pain is frightful, and a clean cut with the knife can reach just as far into the surrounding healthy tissues; it will heal by first intention and leave less scarring.

In cases which have advanced so far as to be inoperable, or to the point that metastases have occurred, so that hope of cure is lost, then something to remove odor and produce a more tolerable condition, chloride of zinc or some other caustics may be used to good advantage. The hypodermatic injection of a solution of pyoktanin is just now the fad, but from the reports I have been able to find it does not seem to possess any superiority over its predecessors.

Perhaps some time the cancer germ may be discovered and a treatment grow from that, but at the present time I see nothing better than radical and early use of the knife. If the diagnosis is made very early and the surgeon is not timid, and so presents the case to the patient that he is inspired with similar courage, there is some hope.

The wide differences in the records of different operators is largely due to differences in the time of the operation and the zeal with which the surgeon sets about getting outside of the diseased area.

Kocher reports seventeen different operations for excision of the rectum for cancer, and of this number twelve survived the immediate dangers of the operation. Of these twelve cases no less than nine, or 75 per cent., are said to have been radically cured, and were alive and free from recurrence when examined four to sixteen years after operation. All of these cases had the diagnosis confirmed by the microscope. If these operations had been postponed until extensions of the disease had occurred, or the operator had been timid about removing plenty of tissue, no such high percentage of recoveries would have been possible.

Warner collects statistics of 866 cases of cancer of the lip, removed by operation, and finds that 28.1 per cent. had not relapsed at the end of three years. He finds that the proportion of females to males affected with cancer of the lip to be as one to nine.

As cancer of the lip is usually discovered

early, it would seem as if this per cent. of cures is small.

Of late the most common operation for carcinoma of the uterus has come to be total extirpation, but some still contend that when confined to the vaginal portion of the cervix the best results, or at least as good results, are obtained from supra-vaginal amputation of the cervix.

Dr. Winter, of Berlin, in substantiation of this claim, quotes from the records of the *University Gynecological Clinic* of Berlin. Since 1878 he finds that 155 supra-vaginal amputations have been done. Of these, ten died from the immediate effects of the operation. Thirteen were lost sight of. Of the remainder there were 25 per cent. of recoveries or cases which had not relapsed by the end of five years.

In the *Annals of Surgery* for the current year is a result of a recent report by two German surgeons, Terneer and Hartman. They give the history of thirty-four vaginal hysterectomies for cancer of the uterus. Of these eight, or 23½ per cent., died from the operation. Of the remainder only nineteen of those who had had a complete operation were kept under observation. In April of this year five of these were still free from recurrence.

The time which had elapsed since operation ranged from six years down as low as eight months. This is no better showing than made by Winter in his list of cases which had only had supra-vaginal amputation performed.

If is claimed that of all women falling victims to cancer of the uterus only 25 per cent. are operated upon, and of those operated upon about 25 per cent. do not relapse. In other words, of every sixteen women affected with the disease fifteen of them die and only one recovers. Not a very flattering showing surely! Let us theorize a little. If every general practitioner were so alert that he made a much earlier diagnosis and impressed his patients with the necessity of an early and radical operation, is it absurd to suppose that 50 per cent. remain free from relapse? That would be saving four out of sixteen in place of only one.

The most hopeful paper I have seen of late appeared in the *Medical Record* of February 27, 1892. Its author, Frederic S. Dennis, professor of surgery in Bellevue College, is a careful scientific observer, not given to groundless enthusiasms, but truly moderate and conservative in all his opinions. His paper is based upon his own personal experience in a series of seventy-one cases of amputation of the breast. There was only one death from the immediate effects of the operation and that was a case of hæmophilia. Of the surviving cases thirty-three were affected with carcinoma. All were submitted to competent pathologists, and the clinical and microscopical examinations were in harmony. Of these thirty-three cases two were lost sight of, so that the statistics are based upon the thirty-one remaining cases of pure carcinoma. Eight of these were free from recurrence at the end of three years — more than 25 per cent. of permanent cures. But in the list are several others which have not reached the three years' limit since operation, and he justly assumes that some of them will do so.

He concludes that not less than 30 per cent. of his cases have been cured.

The usual statistics given for mammary cancer show only 15 per cent. of permanent cures. He attributes his greater per cent. of cures to earlier interference and more radical operations. In the eight cases which had not recurred at the end of three years, the average length of time the disease had existed was only six months. His operation is thorough, as it must be, if one does not wish to court failure. He removes the "entire breast gland, all the fatty areolar connective tissue in the vicinity, the integument over the circumscribed area of the tumor and as much more as is necessary, leaving out of consideration altogether the question of flaps to cover the wound, and finally the pectoral fascia."

Dennis concludes his observations by the following ringing and hopeful words: "I feel justified, in view of these facts, to prophesy that with early and radical operations the recurrence of carcinoma of the breast, after removal of that gland, will be

comparatively speaking, of less frequent occurrence. I feel confident that with the early recognition of the disease and with complete operation, together with the improved methods in the technique, that amputation of the breast for carcinoma of that gland will yield results more brilliant and startling than the most sanguine surgeon can imagine."

Why such a large percentage of operated cases recur, Dennis ascribes to one of three reasons: (1) Some defect in the operative technique; (2) an unreasonable delay in arriving at a positive diagnosis; (3) a great diversity in their histological formation. The first two of these causes are largely preventible or at least improvable if the medical profession will be alert.

Carcinomata uteri are almost entirely in the hands of the general practitioners in the early stages, and whether we operate upon them ourselves or send them to a surgeon, it behooves us to not be caught napping. If there is the slightest suspicion, a thorough examination should be instituted — not next week or next month, or when the weather is cooler, but to-day — and if further investigation increases the suspicion, there should be no stopping till a definite diagnosis is reached. In all cases a cutting should be made for microscopic examination. If cancer is proven, the patient should be given to understand the exact situation — what she has to expect without an operation and what the outlook is with one, and urged that if she wants anything done at all it must be done at once.

Many of us, I fear, are tempted to compromise with our cancer patients; we are led to make use of treatment less radical than our best judgment fully approves. We do this in deference to the wishes of our patients or of his family. They fear the knife. They wish a salve. We know that our medical friend across the way will give them about what they want; hence we hesitate, we temporize. Meanwhile the cancer is doing its allotted work more faithfully than we are doing ours. Finally we awaken to the fact that the golden moment has passed and the disease has advanced to a stage where even the most radical operative work will be more than likely to be followed by early recurrence.

I do not mean to affirm that all members of the medical profession adopt such tactics, but I have known several very good men who were guilty of it, and there can be no doubt that most of us allow the opinions of our patients to control us too much. It is time that the rank and file of the profession put their shoulders together in solid column and refuse to be cajoled into these cowardly temporizing methods. It is our duty to educate the public to the correct and orthodox opinion that only early and complete removal will offer any hope of permanent cure. It is very easy to sit down and tell a patient the real facts. That cancer, as they know, is a dreadful disease, that we have no specific, that at first is so localized, but that the longer it is allowed to take its own course the more likely it will be to be disseminated; that in most instancss people postpone having an operation done until too late to expect a cure; and that in all probability if all cases were operated upon early and radically the disease would cease to be looked upon with so much terror.

On the other hand, if a case comes to us so far advanced that cure is out of the question, and we feel that life could be prolonged and suffering lessened by operation, let it not be withheld. But for the good name of the profession as a whole, and for our own consciences, let it be fully explained to patient and family that this is not an operation for radical cure. I feel confident that if the regular members of the medical profession would take such a uniform and radical stand as has been indicated, it would be the means of putting the treatment of cancer upon a much more satisfactory basis.

REMEMBER that there will be a joint meeting of the East Kansas and Golden Belt Societies at Junction City in October. Watch for the program and make yourself ready to attend and enjoy a profitable and pleasant day.

Hydrophobia, with Report of Two Cases.

Read before the N. E. K. M. & P. Association at Wetmore, August 2, 1892,

By J. E. LOVE, M.D., Whiting, Kansas.

On May 7, 1891, a young man, aged nineteen years, presented himself at my office, complaining of a severe neuralgic pain in the lower jaw, affecting the roots of the two central incisors; the pain and tenderness extending downward to the mental process.

On examination, I found the two teeth quite loose with slight ulceration of gums and necrosis of the alveolar process. I advised extraction of the teeth and the removal of the diseased portion of bone. The patient wishing, if possible, to retain the teeth, I referred him to A. W. Davis, D.D.S., of Holton, Kansas. Dr. Davis advised extraction of the diseased teeth, which was done at once, and the diseased bone removed with a gouge. The patient remained under the care of Dr. Davis until the morning of June 2d, when I was called in great haste to see him. On arriving at the house, I found the patient resting comfortably. On inquiry as to the nature of the trouble, the father stated that his son had had four slight convulsions—two the evening preceding my visit and two the morning I was called; said they were coming more frequently and with more force. He further stated that his son had been despondent for the past week or ten days; that he did not like to be left alone. The patient said he was restless the preceding night, but he thought he had no convulsions during that time. He complained of constriction of the throat, and just as the convulsions would begin or just before they became noticeable, he would complain of excruciating pain in the affected jaw, and said the pain passed from thence directly to the heart. And he made the remark several times that the heart would burst, and would tell us that he was smothering to death.

I sat down and waited a few minutes, when a tremor passed over the body, followed by strong convulsive movements with some degree of viciousness. This lasted about three minutes, followed by a short interval of rest, during which time the patient manifested a very sullen disposition, it being very difficult to obtain answers to questions asked him. From this time the paroxysms returned at shorter intervals and with renewed force. The patient would strike at his attendants, and would try to bite his hands if allowed to get them near the mouth. At one time he attempted to seize his arm with his teeth, but succeeded in getting hold of his flannel sleeve, removing a portion of the cloth. He would also bite at the pillows, and would hold onto them with the teeth so that it was impossible to pull them away without tearing the cloth.

The treatment of this case will require a very small space for its description. I controlled the paroxysms with chloroform inhalations, and the patient being unable to swallow anything, I administered large doses of chloral hydrate per rectum, repeating the dose at intervals sufficient to produce rest. This condition continued with but little change. The convulsions returning, if the patient was allowed to pass from under the influence of the chloral, until the evening of the third day, when he passed into the paralytic stage, after which he sank rapidly until 12 o'clock of the fourth day, when he died.

On Saturday, June 6th, about six hours after the death of the first case, I was called in great haste to see a brother of the deceased, aged fifteen years, who, as I was informed, was taken the same as the other brother had. Found this patient lying on a cot, very much excited and apparently trying to hide from some terrible enemy. He had had three light convulsions before I reached the house. In about ten minutes after my arrival, he passed into the most frightful convulsions I ever saw, snapping at every object he saw, and the stridulent respiration, caused by the laryngeal spasm, could well be made to simulate the snarling of a dog by an imaginative mind.

The treatment in this case was carried out about the same as in the first, it requiring large doses of chloral to produce rest until the evening of the second day, when he

awoke, seemingly much improved; called for something to eat; took the nourishment given him with a relish; talked to the family in a very quiet manner for two or three hours, then became very much excited, and the slightest motion in the room would cause him to stare at the person making the disturbance with such an expression of ferocity as I never before witnessed; but by kindly talking to him, he would sink into a refreshing sleep. This condition continued during the evening and the following night; took nourishment freely, drank water in large quantities until 6 o'clock the following morning, when there was a recurrence of the convulsions with all their former horror, recurring at short intervals, notwithstanding chlor. hyd. and morphia sulph. was administered in very large doses until 1:20 P. M., when he died, never passing into the paralytic stage.

After the second son developed rabies, I was at a loss to say where it would stop, as the history of inoculation was very obscure. And the second case could not have been caused from fear because there was none of the family except the father informed of the probable nature of the first patient's trouble. I used this precaution for the following reasons: The symptoms in this case were not as well defined as those subsequently developed in the case of the younger son, and none of the family or friends suspected the patient was a victim of that dread disease. The only history obtainable that would throw any light on the possible origin, mode or time of inoculation was the fact that in the spring of 1884 there was a rabid dog passed through this neighborhood, and in a short time three calves on this farm became blind and could not suck the cows, and the boys, not suspecting the nature of their disease, worked with them to get them to the cows, and with their hands would place the teats in the calves mouths, and in so doing their hands would become covered with the saliva of the calves. In a few days the calves began having convulsions and died. About the time the calves died, the dog belonging on the farm developed rabies and was killed before it left the place or did any damage so far as could be ascertained.

In view of the fact that the other brothers were exposed to inoculation as well as this one, so far as any history would show, I thought it best not to inform them of the probable nature of the disease from which their brother was suffering. From this fact you will see that the second case was not caused by fright, as has been reported.

Not being satisfied as to the origin of inoculation, I asked for council to help me, if possible, to arrive at some definite conclusion, and to relieve the minds of the other members of the family. Accordingly, on June 7th I was met by Drs. Scott, of Holton, Riggs, of Muscota, and J. L. Love, of Whiting. After thoroughly going over the subject, we could not satisfactorily decide where or by what means inoculation had taken place. We concluded, however, that the other son should be removed at once, as he was growing quite nervous over the surrounding circumstances, and was expecting every hour that the next victim would be himself, so it was agreed upon to send him to Dr. King, of Kansas City, who effected a marvelous cure by his ability in impressing on the mind of the patient that he was in possession of a never-failing remedy for rabies. Since meeting with these doctors, I have gone over the field very minutely, and have arrived at this conclusion: These boys being respectively seven and twelve years of age at the time the rabies developed on this farm would be the ones most likely to be playing with the dog more or less, and, as has been proven, the virus may be contained in the saliva before the symptoms of rabies become noticeable in the rabid animal. In this way the virus has been conveyed from the mouth of the dog to some abraided surface in the mouths of the boys, and inoculation has taken place in that way, the hands acting as the medium by which the poison was carried.

As I have omitted one important fact bearing on this idea, I will make mention of it here. The youngest boy began complaining of pain and soreness in and around the

second molar of the left upper jaw a week before he was attacked by the convulsions.

Each of these cases presented the symptoms characteristic of this disease in the main. In the first we had the hydrophobia, in the second it was wanting or nearly so. The first presented the lethargic form, the second the furious. In the first we had constipation, and at first retention; and later, suppression of urine. In the second these secretions were about normal. In both the saliva was greatly increased. The symptoms common to both was the pain in and around the affected teeth, which would invariably recur just before a paroxysm. This pain, lasting but a moment in the teeth, would pass from thence to the heart; then the convulsive movements would appear with the exclamation from the patient, "my heart will burst". This was followed at once by unconsciousness, which lasted for from one-half to two minutes.

Now, gentlemen, I do not wish to bore you by making the attempt to give you a detailed account of the history, etiology or treatment of rabies. I would simply refer you to the work on hydrophobia, by Pasteur, who has done for the world in controlling the ravages of rabies what Jenner has done with his vaccine virus.

As to the treatment, all we can do at the present time with the limited means at our command is to excise the wound inflicted by any animal when we have the least cause to suspect the existence of rabies in the animal causing the wound. Where excision is not practicable, the wound should be thoroughly cauterized. In either case the treatment should be carried out as early as possible after the wound is produced.

So far as the treatment is concerned after the paroxysms have occurred, it is very unsatisfactory; so much so that the report of a recovery is looked upon as a mistaken diagnosis or a case of lyssophobia.

The symptoms demanding our almost exclusive attention is the terrible convulsions with which we meet in every case. To control these and keep our patient in as quiet and comfortable condition as possible should be our chief aim, and my experience teaches me if we succeed in this we are doing exceedingly well. To attain this point, I believe we can find no drug that we can rely on so much as we can on chlor. hyd. This will answer until a few hours before death, when I found nothing short of comple anæsthesia with chloroform will produce the slightest effect.

Why I Am An Allopath.

By S. MURDOCK, A.M., M.D., Oneida, Kas.

Read at the Northern Kansas Medical Society and printed in this journal by special request.

Not because this school has conquered nature or achieved universal knowledge, but because she has stimulated inquiry, and through agency she has upheld research into every branch of science open to humanity. In traveling from the Orient through the western nations a philosopher will find that the bible is the root from which all the religious tenets and beliefs are adopted by its people. So allopathy has been and now stands pre-eminent as the root from which all medical science has sprung, and upon this rock all investigators have started to erect their structure.

Beginning in the infancy of historic ages, and amid barbaric thought the original investigators — the parents of this school — seemed to comprehend the doubts, uncertainties and ignorance surrounding them, and the errors of a superstitious faith as connected with the healing art, struck out fearlessly in search of facts upon which to found a system comparative and analogical, composed of factors with units and numerals as a base for the mighty structure they were, it seems, unconsciously building, for otherwise they must have been more than mortal. Whilst empirics based their practice solely upon experience, this school took up empiricism and chained it to philosophical science, and built up the first homogenous school. Her real disciples soon found that they must seek for all the facts in all the realms and laws of nature, a practice which they have perpetuated and ever continued.

They early discovered that nature has no abstract laws, and that all organic life is but methods or forms of combined motion; therefore, existence and mutation were the primary facts and conditions and duration of existence — the secondary facts — and that all these presented outlying provinces of conjecture and myth; and were compelled to combat the masses and many of the upper classes who believed that disease was the result of supernatural agencies, resulting from the ire of their deities (a faith not yet altogether eradicated).

She saw the Herculean labor, but with Promethean zeal she entered the field of conflict; she took the Alchemist and taught him chemistry, with which he learned the value of forms and weights, of simples and multiples, and their laws of combinations. She then took the rocks from their homes and made them teach her minerology and geology, and studied the alluvial structure upon the earth's crest; saw how the vegetables were fed, and explored the inherent properties of their roots, trunks, barks, leaves and fruits, and learned by causative tests their influences upon animal life by the processes of secretion, assimilating, stimulating, sedative and alterative effects upon the normal and abnormal, the tonic and atonic condition, and developed the functional philosophy of endosmosis and exosmosis, as well as the atomic theory of science. She entered within the human organism that she might read the formation of parts and their functional, automatic and mechanical uses, served or subserved, in health and disease.

Thus for two thousand years has she worked energetically for the development of knowledge, and been a true mater to all physical science.

It has been claimed that other schools are entitled to the honors bestowed upon her achievements, but they (the modern factions) have no more claim for her originality of development than the sectary has a claim to being the author of the bible from which he draws his inferences. It is doubtless true that opposing factions may have stimulated her energies, for that is a universal result; but they have only built upon fractions of her territory, and without much that is new only in pretense.

The *similia similibus curantur* of Haneman's school was neither entirely new nor a proper foundation for a new school. He may have developed some new experiences, for that is within the province of all students; but so far as being a distinctive or a separate philosophy and to be relied upon, all practitioners of cultivated minds know to the contrary. The theory of infinitesimal portions, to be assimilated by secretion, is nearly as ancient as any theory of therapeutics. The eclectics, so far as they favor progress, or so far as they preserve the known and search for the unknown, are with the old school, but when they claim independence or freedom in the selection from a large variety of qualative remedies, they are only doing what every practitioner has done and ought to do from immemorial time. They are only the cyclops stealing the thunder bolts of Jove from the work-shops of Vulcan. Passing over the other Ephemeral schools, it may be remarked that it is no sign of weakness for a philosopher to acknowledge that himself or his school has not yet penetrated all of nature's workings.

The uncertainty of medicine resolves itself into an apparent want of that uniformity of phenomena which is so remarkable in the other branches of physical science, but the other branches are composed of simples, and as such are uniform; but with us they are complex and not uniform, except by specific multiples, which can never be conquered by man until by development or creation he acquires a faculty to comprehend the infinite; therefore, this school has for ages taught science with art, and gives her patronage and honors to *arte medica*.

We cannot keep out of our ranks the sluggard, the jealous, the envious, or the ignorant, who love to put on the glamor of science; at the same time their brains are covered with mildew and their little jealous hearts putrid with a fatty degeneracy begotten of their own vanity and stupidity. Neither should we be discouraged if we are looked upon with some disfavor by those

who have attained a mark of distinction, for they, not having made a special study of this complex subject, are liable to form their conclusions from direct bearings.

In all her literature the old school is free to comment often and largely upon the uncertain and the unknown, and always inviting inquiry and research, and advising care and caution to the practitioner and examiner. There are many simple and ever-present questions upon special science which arise as numerous as the definitions in nosology, as given by different authors, amounting to more than one mind can retain. What is now needed is the union of the mental with physical science—not more remedies, for there are more remedies now in the laboratory than any one individual can have opportunity to test in a lifetime, but more knowledge of the processes of mental and physical life. The end is not yet. The gorgeous temples of folly are built by the enslaved votaries of selfishness; the splendid palaces of monarchs are built by enslaved victims of fear; the crown of wisdom can only be won by the unselfish and the fearless; and science suffers most from those who cannot be taught to realize how ignorant they are or how vast the field they have not the capacity to explore. Humanity presents an awful chaos—light and darkness, mind and matter, and passions and pure thoughts mixed, and contending without apparent end or order. Midst all this confusion allopathy stands bravely and wisely at the helm of the grand old ship of progress with her compass and charts, and instruments of research and relief, like the experienced pilot who never for one moment forgets that the main channel of safety to-day may be changed by the ever-moving quicksands on the morrow, and that his line of defense must be varied accordingly.

SALINE purgatives should be given in cases of obstruction of the bowel other than stricture, volvulus, hernia or intussusception. In partial stricture salines are indicated. Where the obstruction does not yield in a reasonable length of time even saline purgatives may hasten death.

Dysentery.

Read before the N. E. K. M. & P. Association at Wetmore, Kansas, August 2, 1892,

BY

S. E. SHELDON, M.D.,

PROFESSOR OF RAILROAD, MILITARY AND CLINICAL SURGERY IN THE KANSAS MEDICAL COLLEGE.

The subject that has been assigned me by our committee on program is one of great interest to every practitioner of medicine, and the recent progress that has been attained in its pathology, etiology and treatment makes it especially interesting to us, as a difference of opinion still exists among prominent pathologists as to its true pathology and etiology.

The term "dysentery" does not signify anything, so far as conveying any idea of the existing pathological condition, which is an "ulcerative colitis," the word being from the two Greek words: dus—difficult and enteron—bowels. That does not express anything definite, but by general consent and ancient usage we all understand what is meant by it and so we will let that pass, hoping that at some future day our medical nomenclature will be so improved that the name of a disease will convey some idea of its true pathology. Dysentery has been recognized for centuries as a specific disease under the synonyms of flux, bloody flux, colite, ulcerative colitis, etc., even before the days of Hippocrates. In the well-known writings of Herodatus, over 400 years before Christ, we find that this disease and the plague decimated the army of Xerxes on the desert plains of Thessaly worse than the fortunes of war. We find in the writings of Hippocrates that he considered it a "catarrh of the bowels with ulceration."

Etiology.—While it is true that dysentery is most prevalent in the tropics and in warm climates, and is more apt to assume an epidemic from there, still in our own temperate zone it is a frequent disease, occurring most frequently in warm weather or in the autumn when the change in temperature is greatest from day to night; not that the heat or change of temperature should be the direct

cause of the disease, but indirectly a predisposing cause; as they may and do render the system less able to resist the true cause of the disease, which is the dysenteric germ or "amœbæ coli" which we believe to be the true cause of dysentery.

Losch I believe it was who first discovered the amœba coli of dysentery, and Kartulis recently found the parasite in 500 cases of dysentery, and in all cases of abscess of the liver the sequela of dysentery. Massintin also found the parasite in chronic as well as in acute dysentery. These dysenteric germs were found in the discharges from the bowels, in the pus from abscess, and in fatal cases in the blood and soft tissues of the body. These amœba are circular in form, sometimes ovoid, and when in motion irregular in shape, and under favorable circumstances would retain their amœboid movement from two to ten hours after being removed from the body. Pure cultures were made from these germs and when injected into animals reproduced the disease in them.

Dysentery is a contagious disease. The contagion being transmitted (1) through the air, (2) through the secretions, and (3) through the excreta from the bowels. This latter is probably the most frequent mode of infection, and it admonishes us of the importance of removing and disinfecting the discharges from a dysenteric patient at once.

Dysentery may be sporadic or epidemic. When the latter, it is usually of a more severe type and more malignant in character, and its contagiousness seems to be intensified.

Dysentery has a period of incubation of from seven to ten days, and the experiments with the culture of these germs showed that they attained their highest degree of virulence from the seventh to the tenth day.

There are many other indirect or predisposing causes of dysentery, among which may be named the condition of the soil, the humidity of the atmosphere, the character of the ingesta, improper and insufficient clothing, imperfect ventilation, such as crowded barracks and tenement houses, and other unsanitary influences.

There are two forms of dysentery usually recognized by pathologists, though the etiology of the two are the same, differing only in the extent and virulency and the tissues affected, and the different degrees of severity. Virchow designates these respectively as catarrhal and diphtheritic, since which time this division has been recognized and adopted by most authors and teachers, while sometimes one form merges into the other so that it is impossible to draw any line of demarkation, and again the plastic exudation is found upon the mucous surface of the catarrhal form. Still this distinction has been maintained and we will not interfere with it. While in actual practice it will make very little difference in the management of your cases, except as the one will require more active, heroic and persistent treatment than the other.

Again it seems to me that the term diphtheritic is liable to be misleading in its meaning; it should not be confounded with that condition so frequently found in the throat and which is produced by a specific microbe and requires specific treatment, but it should be considered as an inflammation of the mucus, submucus, muscular and serous coats of the colon and rectum, with more or less ulceration and the exudation of more or less plastic material, both upon the mucous surface and throughout the various tissues, so that by a microscopical examination the walls of the intestines are swollen and thickened and their lumen diminished. The coats of the diseased colon are in a state of hyperæmia, and so firm and hard are they that they may sometimes be distinctly traced through the abdominal walls. On microscopical examination beneath the exudation may be found engorgment of the minute blood vessels, pus cells in large numbers, as well as the amœba coli or dysenteric germ; and as the disease progresses, we get necrosis of the diseased tissues even to the extent of gangrene and perforation.

In the catarrhal form the summits of the ridges and folds of the mucous membrane which projects into the interior of the bowel are first affected, the mucous membrane of these parts being conjested and hyperæmic

of a red or dark red color, and exuding from it a thick mucus mixed with blood. The submucous tissue is also swollen and inflamed. In the earliest stages the microscope reveals a dilitation of the minute blood vessels; soon all the tissues become swollen and inflamed from the toxic effect of the pathogenic germs or their ptomains, and pus cells and pus microbes are found throughout the tissues, but mostly in the vicinity of the blood vessels. In the earlier stages of the disease the solitary glands are affected and appear upon the surface as white points with red rings around them, while the lymph spaces are enlarged, but do not seem to participate in the general disorganization early. A little later the mucous membrane softens and breaks down under the toxic influence of the pathogenic germs, and ulcers are formed co-extensive with the virulency of the disease. At this time the solitary folicles give way, leaving minute holes down to the basement membrane, and they form a portion of the slough. And we have necrosis of the mucous membrane, sometimes extending to and involving the submucous tissue which furnishes one characteristic feature of the disease in the discharges from the bowels.

Symptoms.—There is usually premonitory symptoms of from one to three days of general malaise, anorexia, slight diarrhœa with or without increase of temperature. Though oftentimes the disease is ushered in without any of these premonitory symptoms, but commencing with severe tormana and tenesmus, frequent or almost constant desire to evacuate bowels, passages small, consisting of mucus more or less mixed with blood, and at times shreads of partially disorganized mucous membrane, and very little fœcal matter.

I saw a case last week that commenced with a slight chill and collapse with the first discharge from bowels, and fifteen to twenty passages within the next two hours; when I first saw the patient and found her still in this condition; a hypodermic injection of morph. 1-4 grain and atrophia 1-150 grain with warm-water rectal injections and heat applied externally soon brought about reaction, relieved the frequent bloody discharges and the tenesmus, and with very little other treatment, except the daily irrigation of bowels, my patient made a nice recovery in a few days. The patient had no premonitory symptoms, being as well as usual an hour before the attack.

The diagnosis is not usually difficult, as about the only occasion for differential diagnosis would be in cases of intussusception of lower bowels or obstruction of lower bowels from some foreign body or neoplasm, and a careful examination and history of the case would determine the true character of the disease.

The prognosis in sporadic cases is favorable, while in the epidemic form it is less so, dependent upon the virulence of the poison and our ability to early eliminate it or to counteract its toxic effect. And this brings us to the subject of treatment. But before considering this branch of our subject, let us review the pathological condition and consider it and some anatomical features of the parts a little more in detail in order that we may arrive at a rational plan of treatment.

We have first an irritable, then an inflamed condition of the mucous membrane of the colon and rectum, sometimes extending into the ilium. The disease usually commences in the rectum or in the sigmoid flexure or lower portion of the colon, gradually extending upward.

The mucous membrane being first exposed to the predisposing cause, as well as the pathogenic germs, suffers first and most; then follows the other coats of the bowels in order. Beneath this exudation that is poured out upon the surface of the mucous membrane, as well as throughout the necrosed tissues as we have seen, are found pathogenic and pyogenic germs in great abundance together with pus cells and the debris, the result of decomposition of animal tissue; and all these foreign substances have produced an irritable condition of the colon and rectum, and especially of the sphincter ani. There is another point that should not be overlooked, and that is the sacculated condition of the rectum just above the

sphincter, which is a great receptacle for the decomposing contents of the diseased bowels, and that cannot be evacuated on account of the diseased condition of that portion of the rectum and the irregular spasmodic action of the sphincter, and it lays there a decomposing putrid mass of necrosed tissue and pathogenic germs to add either by its direct or reflex action upon the nerve centers to the already too irritable condition of the bowels and sphincter.

Now, gentlemen, if you should find a similar condition in any other organ or portion of the body, how would you manage it? If upon the surface of the body, would you apply a close dressing that would cover up and keep in these poisonous germs and their toxic ptomains, or if in an internal organ would you close up all avenues of escape and by large doses of opium or other anodyne relieve the pain without curing the disease? Oh, no; you would cleanse the diseased parts thoroughly, remove the pathogenic germs and the diseased tissue, and by antiseptics and antiseptic dressing endeavor to prevent the further extension of the disease and thus hasten healthy repair of the injured tissue. If, for instance, you had a case of cystitis, or of urethritis, or endometritis, or rhinitis, or if my friend, Dr. Magee, should have a case of otitis, or ulcerative conjunctivitis, or interstitial keratitis, any of which had gone on to suppuration with pus cells and other pyogenic germs present, with necrosis of tissue, would you not by proper and thorough irrigation cleanse the parts, and then by suitable antiseptic dressing or applications endeavor to prevent the further development of pathogenic germs and the extension of the disease, and to establish a healthy condition of the affected parts? Then why not give our cases of "ulcerative colitis" the same aids to recovery that we do other similar affections? This can only be done by antiseptic, rectal and colon irrigation. This is no new or untried plan of treatment, for we find that it was practiced by the Greeks and Romans, who believed that it removed the "acrid humors" from the body, the retention of which would intensify the inflammation. And so it comes to pass that after so many centuries, aided by the development of the microscope and the science of chemistry, we are advocating the same general idea, only elaborated and more intelligently applied by the aid of modern science and clinical research.

The plan which I wish to present is the thorough washing out or irrigation of the colon and rectum by means of a long, flexible rubber tube that can be readily passed beyond the sigmoid flexure (No. 18 English or No. 30 French size is a very convenient size for the inflowing current, while the escape tube may be a few sizes larger) and then by attaching it to a fountain or Alpha or Davidson syringe the whole colon should be thoroughly washed until the fluid comes away clear and free from any evidence of disease. The larger or escape tube need only pass into the rectum two or three inches, but to its distal end should be attached a piece of rubber tubing sufficiently long to convey all the escaping fluid into some suitable receptacle on the floor. With this precaution there is no need of soiling the patient's clothing or bedding, or for the attendants to soil their hands.

The irrigating fluid may consist simply of sterilized water, or it may contain any of the well-known antiseptics. Among those that have met with the most favor we might mention boric acid, hydro-napthol, chloride of sodium, salicylic acid, carbolic acid, sulpho, carbolate of zinc, thymol eucalyptol, hyposulphite of soda, sub. nit. bismuth, terabinth, hydrarg. bi-chloride, etc. If the latter is used, it should not exceed in strength 1 to 5,000, and then only be allowed to remain in the alimentary canal a few moments for fear of its toxic effect, while the others may remain a much longer time and be repeated as often as required.

The immediate effect of such irrigation is to relieve the tenesmus and tormina, and lessen the number of discharges from the bowels and give the patient perfect rest and quiet. The effect is often magical. If the attack of dysentery has not been preceded by a diarrhœa, or if the bowels have not been freely evacuated, it is good practice to

give a full dose of sulph. magnesia or some other saline cathartic, or what I like fully as well is a tablespoonful of equal parts of castor oil and glycerine, repeated every hour if necessary until the desired effect is produced. The glycerine you know is an antiseptic, and besides produces free watery discharges. In severe or diphtheritic form of the disease the irrigation may require to be repeated every four to six hours at first, while in the milder or catarrhal form every ten to twelve hours will be sufficient.

The temperature of the irrigating fluid should be from 100° to 105° F., though good results are claimed from a much lower temperature when there is considerable febrile excitement.

Joseph Kent wrote in 1826 that he had employed ice-water injections for dysentery at half-hour intervals with speedy relief.

Surgeon Hare, prior to 1834, treated 346 cases of dysentery in Calcutta of the severest type by what he calls the high injections with but 3¾ per cent. mortality.

In a recent communication by Dr. Korytin he refers to Dr. Strhogloo as having published five years ago the results of his treatment by washing out the bowels with a five per cent. solution of carbolic acid. Sixteen cases were reported with excellent results, and Dr. Korytin in the same year reported the same method in eighteen cases. He used warm water or warm carbolized water, and allowed from four to six pounds of the solution to remain in the bowels from ten to twenty minutes. Though most of these were of a severe diphtheritic form, the relief was immediate and the final results satisfactory. In a large number of cases, where the disease is in the rectum or in the sigmoid flexure, the rectal injections will be all that is required.

In making irrigations of the upper part of the colon, the position of your patient is a very important factor. He should be placed upon the right side, the hips elevated from four to six inches, thereby facilitating the passage of the irrigating fluid through the whole extent of the colon, and it is claimed by some that the fluid can be made to pass into the lower portion of the ilium. Perfect quiet in the recumbent posture is an important factor in the treatment of dysentery, and should be insisted upon.

Diet.—Proper diet is as essential to success as any other part of the treatment. A strictly liquid diet should be insisted upon, consisting of milk, animal broth, beef tea, etc., and not one particle of solid food should be allowed as long as there is any considerable tenderness over the region of colon.

My friend, Dr. S. G. Stewart, of Topeka, Kansas, has recently treated several cases of dysentery by the above-described method with very satisfactory results. In one case, which was unusually severe, he made a very important addition to the treatment, which is so rational and was so satisfactory that I heartily commend it to you for further trial. It was this: After thoroughly cleansing the bowels as directed, but before removing the long tube, he injected into the colon two or three drachms of sub. nit. bismuth. In aqueous solution or suspension, his idea was that the sub. nit. bismuth was not only an antiseptic, but that it formed a coating over the mucous surface of the diseased bowels, which was soothing, and protected them from all irritating ingesta as well as from the secretions of the upper bowels.

If, then, the above views of the pathology and etiology are correct, the ordinary treatment by opiates and astringents is irrational and unscientific, and the line of treatment which we have indicated — varied, of course, to suit each individual case and supplemented by such other treatment as may be indicated — becomes the rational treatment for dysentery.

"PACKARD prefers the trephine to the chisel for entering the cranium, on account of the concussion produced by the latter."

We think the point well taken.—ED.

Gerster says the trephine should not be used in such cases.

Encephalocele, according to Broca, should be excised and not injected with iodine or punctured.

A New Method of Inhaling Medicated Vapor.

By H. Z. HISSEM, M.D., Ellsworth, Kansas.

The efficacy of inhalations of medicated vapor in the treatment of chronic diseases of the air passages is now very generally admitted by all who have made a special study of tubercles and other chronic diseases of the throat and lungs. Those who have experimented with this method of treatment, no doubt have been impressed with the fact that its utility depended upon the quantity of vapor which reached the affected parts. The indifferent results obtained so far in this particular have discouraged many who, not meeting with anticipated success, have abandoned this method in disgust. Some practical ideas have suggested themselves to my mind—the outcome of several years' experience with the inhalation treatment, the adoption of which has been of material benefit to me in many cases.

Vapor produced by a hand-bulb vaporizer or by compressed air applied directly to the tube and forced into the respiratory tract, I believe to be harmful, in that the force necessary to produce a vapor, when thrown directly into the nose or throat, is sufficient to create an irritation of the mucous membrane lining those cavities. Through the Besseler globe inhaler the vapor can be inhaled in a quiescent state, the compressed air being turned off during the process of inhalation. Heretofore the medicated vapor has been introduced into the lungs *via* the mouth, which is certainly not the physiological manner of breathing, and the inhalation of vapor sufficiently laden with the medicament to be beneficial will very often act as an irritant to the fauces, followed by persistent coughing, which interferes considerably with and often renders such treatment impossible. This is particularly true of creasote.

In the New York *Medical Record* of March 26, 1892, appeared an article from the pen of J. Blake White, M.D., entitled "A double nasal spray and vaporizer," in which he recommended the inhalation of vapor through the nose instead of the mouth. With his instrument the compressed air was applied directly to the tubes and *forced* into the nasal cavities. Acting on his suggestion of nasal in preference to oral inhalation, and wishing to avoid the irritation caused by the direct force of the air, I had the double nasal inhaling tubes made, of which the accompanying cut is an excellent illustration.

The bulbous extremities are made in two sizes and the flexible connection makes them easily adjusted to any shaped nasal orifice.

Since using this instrument I have had very gratifying results, and I trust it will prove a means whereby we may be able to more effectually cope with that dread disease tuberculosis.

Consumption, it is claimed, kills one-seventh of the human family. It destroys more lives than cholera, small-pox, yellow fever and rabies combined.

It is a contagious, preventable disease. The conclusion then is that a consumptive should be isolated, and as great or greater precaution taken to prevent the spread of phthisis than any and all of the diseases before mentioned.

A phthisical patient should not use a box of dry ashes or earth to spit in, but a pan of clean water, and the water should be changed and the pan cleaned frequently.

Instead of a handkerchief to wipe the mouth, small pieces of old, soft, clean muslin should be used and burnt immediately.

Uncle Sam is thinking of starting a national sanitarium. A joint resolution has been introduced in the senate to that effect.

SOCIETY PROCEEDINGS.

Kansas State Medical Society.

[CONTINUED FROM JULY NUMBER.]

Dr. Bauer, of St. Louis, read a paper on "Apparatus for Fracture of the Femur."

In the discussion following, Dr. King said he would like to know how to arrange the instrument. He had no objection to offer against it. Had been using Hodgin's splint for over thirty years, and always has had good results and no visible shortening. It is necessary that the splint be accurately adjusted.

Dr. Daugherty said he was pleased with the paper, but we poor devils who practice medicine in the country cannot afford to keep a large supply of splints on hand. The doctor described a case where he had improvised a splint which he made out of fence-wire spools, and the result was perfectly satisfactory.

Dr. Lamphear complimented the principle of treatment. He always used something of this kind in all cases of fracture of the thigh.

Dr. Bauer, in closing, said he admitted that various measures would perhaps answer in certain cases, but he would prefer a perfectly-fitting instrument. The measurement with tape is a perfect failure.

On motion, Prof. Bauer was extended a vote of thanks for his most excellent paper.

Dr. H. C. Dalton presented a paper on "Stab Wounds of the Liver, Stomach and Gall Bladder."

Dr. Van Eman said there was very little to discuss except in regard to irrigation. Was not so much afraid of blood in the peritoneum.

Dr. Cordier said a temperature of 103° was too high, and if he would irrigate it would be kept much lower. In the majority of cases we have shock, and irrigation will prevent it.

Dr. Bauer said a very important feature in the treatment of cases where there is great loss of blood is the intra-venous introduction of chloride of sodium.

Dr. Dalton, in closing, said he presumed Dr. Cordier's experience has been with women. Nearly all gunshot wounds give a reactionary temperature. Can leave water in the peritoneum, but does not care to do so. Used always to use syringe to clean out the drainage tube, but now does not do so. Always use rubber tube.

Dr. Gray read a paper on "Colecystotomy."

Dr. Lindsay opened the discussion. He said: "It is my experience that in such cases the hypodermic injection of chloroform into the gall bladder will relieve. Have done this four times with gratifying results. I fill the syringe with Sqibb's chloroform and inject the same into the gall bladder."

Dr. Foster said: "Gall stones do not all dissolve in chloroform. Some do, but others do not."

Dr. Guibor.—"I had the pleasure of seeing one case in the doctor's hands. I am a fit subject for treatment. For six years I suffered from attacks of gall stones. I went to Dr. Parks for an operation and he advised me against it. I had been asked to try olive oil. I began the use of it. It is not claimed that it will dissolve the stone, but it supplies a fatty acid which prevents the formation of the stone. Since beginning the use of the oil, I have only had one attack in thirteen months."

Dr. Russell.—"I have tried the oil in two or three cases and in one case was well pleased with the result."

Dr. Gray.—"I have never tried the injection of chloroform, and I doubt very much if I could have in these cases gotten it into the gall bladder; but I have four different times taken a stone from bladder and dropped in chloroform and left twenty-four hours without reducing it. In regard to olive oil it is admitted it does have a good effect in some of these cases. In my cases they could not take it. It nauseates. I don't believe either of these remedies would do any good with so large a stone. Some German has declared glycerine to be preferable to either."

By motion of Dr. Munn, Dr. Brierly's paper was advanced on the program.

The subject of his paper was "Tuberculosis."

Dr. Fulton, in discussing the paper read by Dr. Brierly, said: "One dares not to contradict the theorist. In the first place we are not to dispute the presence of the tubercle bacillus; but when it is claimed that tuberculous infection is not hereditary, then it is time to take issue. People who have tubercle are with us all the time. Why, then, do we not have (if it is contagious) constantly infected cases? Climate is the treatment. I have had good success by using the Bergeon bag, creasote and turpentine placed in the jar, and the patient allowed to inhale the fumes. This promises much."

Dr. King said: "I do not want to be taken as authority on tuberculosis, but have kept posted, and think there are more cases of infection than heredity. Favorable soil is often present. When the tissues are in a favorable condition the bacilli find lodgment much more readily. Germans say that galloping consumption is caused by the infection attacking the veins, and then the wall is penetrated and the lung infected. We are too much disposed to give up our cases. Dry and high atmosphere will often cure bad cases. I think there are more deleterious substances in the atmosphere at the seashore than any other place. I think the cure in high altitude is largely mechanical." He explained his theory, which is that the lack of lung expansion at home will be relieved by the lighter atmosphere and thus the air vesicles are washed out, expanded, strengthened and cured.

Dr. Daugherty desired to know what kind of cases should be sent to the high altitudes. Does not think any person inherits the germs, but are infected some time in life.

Dr. Bauer said: "It was once thought that those who had blonde hair were sure to have tuberculosis, that black-haired people seldom had it, and those who had no hair at all never had tuberculosis. A well-known microscopist in Germany said it was not possible to tell tubercle bacilli, and that the microscope is non-essential in diagnosis because no one ever pretends to go to the microscope to diagnose. The medical profession has been too credulous in many respects. Stubborn facts are the authority in natural science, and such should be the case in medical science. Why is it that children who depend upon the mother's breast never or seldom have consumption? Why does tuberculosis rise and fall in cycles? Injuries cause joint disease and then these are called tuberculosis of joints. There are tubercular affections of joints, but they are multilocular and not unilocular. I do not think tuberculosis is so widely diffused as some of the most ardent would have us think."

Dr. Liggett reported a case who had incipient tuberculosis, and who has greatly improved upon the use of creasote and inflation of the lungs. Used a tube to inhale the medicine.

Dr. Brierly said, in closing, that he was gratified for the discussion. He asked Dr. Bauer why he did not take whooping cough the same as a child, in answer to question regarding nursing children having tuberculosis. He said that to put the tuberculous joint at rest you at once cured tubercular affection of the joints. He was not surprised that the doctor should be so conservative because of his great advancement in treating broken bones.

Session called to order at 9:30.

Motion to limit discussion to five minutes.

Motion made by Dr. Cordier to instruct the secretary to get a stereotype plate for certificates of membership, also plates for credentials to A. M. A., was carried.

Secretary read telegrams of greeting from societies of Michigan and Wisconsin in session.

Motion that secretary be instructed to furnish credentials for members who desire to attend the A. M. A. was carried.

Motion that the same rule apply to the Missouri State Association also carried.

The time of committee on necrology was extended till next annual meeting.

Motion by Dr. Cordier that the judicial council be empowered to revise the constitution and by-laws passed.

A paper was then read by Dr. Liggett on "Anæsthesia."

DISCUSSION.

Dr. Oldham.—"The choice of an anæsthetic is largely influenced by his surroundings and practice. In the cities and towns I believe chloroform is more generally used than ether, and I think as safe. I think the period of excitement depends upon the administrator. If the chloroform is crowded down, you will not have this excitement. Using ether where there are lights is an absolute danger. I have observed the distressed look of patients under ether — purple face and distended veins — and it appears to me more dangerous than chloroform. I have had and have seen no accidents from chloroform, and I think these are the result of incomplete anæsthesia. If an operation justifies an anæsthetic at all it deserves complete anæsthesia."

Dr. Porter.—"I would indorse Dr. Oldham's idea of pushing the chloroform. I have seen a child anæsthetized in three seconds."

Dr. Russell.—"My experience is similar to Dr. Oldham. I generally use the chloroform." Reported a case where it was used in labor.

Dr. Graves.—"I do not believe it is safe to push our chloroform so rapidly. We have had one death from chloroform and one from ether in our country, and I think the first was produced from giving the chloroform too rapidly."

Dr. Felty.—"I believe there is a happy medium. In certain cases ether does more harm than chloroform. In cases where we have albuminuria or latent heart trouble we are likely to cause death. An examination of urine should be made before giving ether. Chloroform in such cases can be given with comparatively no danger. If you do not then make an examination the chloroform is the safer."

Dr. Wakefield.—"I indorse what has been said on both sides. When we are familiar with a remedy we can use it better. I do not believe in the rapid use of an anæsthetic. I have most always used chloroform and think I can use it more safely. I usually take from seven to twelve minutes."

Dr. Haskins.—"I have generally used chloroform and have had no accidents." Reported a case of death from chloroform in a dentist's hands where a fatty degeneration of heart existed. He claimed to have used it with an ordinary cone.

Dr. Lamphear.—"Chloroform should not be given by cone, but with plenty of air and plenty of time taken. When death occurs from it, it is usually early in the administration. The Esmarck inhaler is the most convenient and safer. The reported deaths from chloroform are not all from that cause." Reported a case died on the table, which was so called, but in which I am confident it was not, as no chloroform had been given for several minutes, and death occurred immediately upon touching the diaphragm with my finger in trying to remove a tumor of pancreas." Reported another case apparently in good health. Died before the anæsthetic.

Dr. Cordier.—"In regard to the condition noted by Dr. Oldham in ether narcotism, the surgeon likes to hear his patient breathing, for then he knows he is alright. In chloroform the breathing stopped suddenly. You should crowd your ether and have plenty of air with your chloroform."

Dr. Liggett.—"I do not agree with Dr. Oldham as to the quantity of chloroform and its rapid pushing. The rules are five per cent. chloroform and ninety-five per cent. air. I think I can produce anæsthesia quicker with air saturated with ether. There is no danger of explosion if lights are kept five feet away. The appearance amounts to nothing, and does not compare with that in NO_2 which is our safest anæsthetic. I do not believe it is impossible to anæsthetize any patient with either chloroform or ether. I supposed we would all know the contra-indication for ether. I do not believe in the mixture. I want to know which I have to deal with if there is any trouble."

"Puerperal Eclampsia," by Dr. Russell.

DISCUSSION.

Dr. Lindsay.—"There is nothing more distressing than to be in attendance upon a case of puerperal eclampsia. In regard to the use of veratria: In all these cases of

eclampsia there is an explosion of nerve force or energy. We do not know just the action, but we know that verat. virid. lessens the force in some way. It is the most successful remedy we can use. I use it per rectum in doses of from five to fifteen minims."

Dr. Haskins.—"I agree with Dr. Lindsay as to the efficiency of verat. virid. I think there are cases in which bleeding is better." Reported a case where a drachm of verat. virid. was administered without bad results.

"Extra Uterine Pregnancy," by Dr. Cordier.

Dr. Felty.—"Is the practice of the so-called local uterine treatment based upon uterine pathology?"

"Deficiency of Uterine Force," by Mary Gage Day.

Dr. Russell reported a case in which ergot was used, but as no contractions were produced, manual dilatation was resorted to and child delivered.

Dr. Fulton.—"I do not believe in the early administration of ergot in these cases. It does not aid dilatation of the os."

Dr. J. W. Porter.—"I have gotten good results in these cases from the use of quinine; also by vaginal douches of hot water. I have used ointment belladonna on a rigid os."

Dr. Hall.—"I think there are cases where it is well to give ergot in early stage. When the dilatation does not progress I use belladonna and cimicifuga, and get speedy results. An addition of nux vomica seems to aid in contraction. I think chloroform in these cases, if it can be given, is a good thing. I have used chloroform for a long time and have yet to have an accident."

The auditing committee reported that the bill for banquet at Salina in 1890 was not a matter for the society, and referred the same to the judicial council.

The committee reported favorably on bill of secretary for $60.60 and recommended its payment.

The committee recommended that W. E. McVey be paid $100 for printing reports of last meeting in KANSAS MEDICAL JOURNAL. No bill presented.

Report of committee accepted.

Nominating committee reported as follows:

President—Dr. F. F. Dickman, Ft. Scott.

First Vice-President—Dr. C. H. Schriner, Galena.

Second Vice-President—Dr. W. S. Harvey, Salina.

Secretary—Dr. G. C. Purdue.

Treasurer—Dr. W. R. Priest, Concordia.

Judicial Council—D. F. Longenecker.

Librarian—Dr. G. C. Purdue, Wichita.

Next place of meeting—Topeka, Kansas.

Report adopted.

(Report of section on Ophthalmology and Otology in September number.)

The Topeka Academy of Medicine and Surgery.

The Topeka Academy of Medicine and Surgery met at Lincoln Post hall, Tuesday evening, August 2, 1892.

Present: Drs. Mitchell, Minney, Stewart, Rodgers, McVey, Smith, Hamilton, Powell, Lindsay, Bailey.

The first paper on the program was read by Dr. Mitchell, on "Why Should I Not Use the Forceps?"

DISCUSSION.

Dr. Stewart.—"One very important indication in use of forceps is that the head be engaged; and in regard to cases that are applicable for use of forceps, I understood the author to say there should be no obstruction to the use, such as deformities of pelvis. In some cases where there exist deformities of pelvis the forceps are indispensable. They are used more frequently now than formerly."

Dr. Minney.—"I have used the forceps a good many times. I consider the forceps, like the surgeon's knife, when awkwardly used are harmful, but skillfully used, are valuable. There can be no objection except to the indiscriminate use of forceps." Recommended the forceps recently devised by Dr. DeWees, of Salina.

Dr. Powell.—"My own experience with the forceps is very limited." Spoke of prominent men who seldom used the forceps,

and he believed more harm was done with the forceps than when nature was let alone. Referred to a case where forceps were indicated, but by taking advantage of position the woman was readily delivered. In regard to choice of podalic version or forceps, in the former the head should not be engaged, in the latter it should be.

Dr. Rodgers.—"I have averaged at least one in fifteen or twenty in my own practice in the use of forceps, and I think it was favorable to my reputation. Tried all methods of position and tricks of the obstetricians before using the forceps. Never had but one laceration due to forceps. Would not allow a woman to suffer for long when she could be easily relieved by use of forceps. Prefer long forceps and always have them convenient."

Dr. Stewart.—"There can often be much done by manipulation, and frequently in this way the use of forceps can be obviated. In some cases of deformity I have succeeded in delivering with forceps by changing position. In a certain class of cases the hand is of great service in changing position and other manipulations."

Dr. Mitchell, in closing, said: "Where there are bony deformities or obstruction, such as to make it dangerous or impossible to use the forceps, they should not be applied. In regard to Dr. DeWees' forcep, I was struck with the simplicity of the forcep and the idea of axis traction as applied there. In regard to podalic version, I meant those cases where head is engaged. Where immediate delivery is necessary, and it is possible to choose between forceps or version, I should choose the forceps, as the danger is diminished thereby. Must first ascertain position of head in preparing for use of forceps. If the blades are well adjusted to the head and remain so they should be left on till head is delivered. If not well adjusted or have been moved so excessive stretching would be produced, they should be removed when the head bulges out of the vulva."

Dr. Stewart.—"One reason for removing the forceps is to relieve the pressure on head and brain, caused by the traction."

PROGRAM FOR NEXT MEETING.

Surgical Applied Anatomy.—Dr. Rodgers.

Reports of Cases.—

Committee on hall was instructed to look for other quarters for meetings and report at next meeting.

W. E. McVEY, *Secretary.*

NEXT winter the state legislature will be in session, and as usual a bill to regulate the practice of medicine will be introduced, and we can pretty confidently predict its fate unless some systematic action is taken by the profession. It is not our ambition to see the profession of Kansas turn themselves into a set of wrangling politicians, but we know that every physician has a strong influence in his community, and can do a great deal toward electing or defeating a candidate without neglecting his duties or making himself obnoxious. Let each physician then personally ascertain the position of his candidate for representative on the question of a medical practice act and use his influence accordingly. If this matter is carefully canvassed before the election, and the candidates pledged to support such a bill, its success is assured.

IN this number we publish the remainder of the proceedings of the general session of the state society. The report of the section on ophthalmology will be published in the October number. We would have been pleased to publish all of the papers read at the meeting, and intended to do so, but as they are in the hands of the chairman of the publishing committee we must wait until he sees fit to take some action upon the matter. There were some excellent papers presented, and it is not only a question of justice to the authors, but to the society as well, that they be published.

DR. W. A. WILLIAMSON has been elected to the chair of Histology and Pathology in the Kansas Medical College.

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TOPEKA, KANSAS, SEPTEMBER, 1892.

Periodic Fevers.

The season for periodic fevers is at hand. While these diseases reach their acme of frequency and intensity in the autumn and in hot, damp climates, they are the occasional visitors of all localities and of every season. They are variously called swamp, bilious, autumnal, continued and malarial fevers, intermittents, remittents and ague. Their history reaches back to the earliest records of disease, and had man lived in antidiluvian times when mastodon and megatherium sported in the bogs and bayous and the forests of cryptogams that covered the surface of the earth, and when its central fire kept a large portion of its waters in a state of vapor, these fevers would have soon shaken or burned out his life, and, like these denizens of the old world, he would long since have become extinct.

From earliest history periodic fevers have been attributed to some indiscernable entity or non-entity termed malaria, and since the causation of all disease is attributed to germs, to micrococci malaria. Tomes have been written upon malaria, but neither the nicest chemistry or microscopy have demonstrated its existence. The microscope has proved the presence of certain micro-organisms in all swamp regions, and without its aid they have long been known as the home of alligators and frogs, reeds and water lillies; but many more tomes will be written before either will be proven the remote or exciting cause of these fevers. Medical men too often go around Robin Hood's barn to find Robin Hood, when he stands at the front door.

In all palludal regions there are sufficient causes to account on a physiological and pathological basis for periodic fevers without searching after malaria and formulating laws for its government, or subjecting marsh mud or air to microscopical examination.

The physical conditions of damp air are so well understood that we can easily comprehend why it is more enervating than dry air during hot days and more chilling during the night, and why in all regions where the atmosphere is saturated with moisture there is a wide range between the diurnal and nocturnal temperature.

While eminations from decomposing organic matter may tend to specific disease and may lessen the resisting and recuperative forces of the organism, the atmospheric conditions and the extremes of temperature, incident to all swamp regions, are alone sufficient to account for periodic fevers. Upon this theory, while you cannot drain the swamp or stop the flow of the river any more than you can destroy the unknown entity — miasm — because unknown, and while you cannot prevent the changes in temperature, incident to the physical condition of the atmosphere, everyone can wash the body or rub it with a dry towel when night approaches, put on dry, warm clothing and sleep under a blanket, and so escape palludal fevers in palludal regions.

With this view of causation, attacks of periodic fevers should be preceded by a longer or shorter period of malaise. The functions presided over by the organic nervous system,

disturbed by the nocturnal engorgment of the great central organs, should manifest consequent derangement, as defective digestion with coated tongue and vitiated taste, a torpid liver with evidence of portal engorgment, a sallow complexion, loaded urine, blueness of the nails with deficient circulation in the capillaries of the periphera, chilly sensations, followed by flashes of heat, neuralgic pains, etc.; and these are precisely what do occur, until at last the engorgment of central organs and defective peripheral criculation is marked by a pronounced chill, a reactive fever and diaphoresis.

We need not describe periodic fevers. In all their forms they are familiar to all practitioners in nearly all parts of the world. As those who have once suffered from a marked attack are, for sufficiently potent reasons, liable to a recurrence under the less-marked diurnal and nocturnal changes in the temperature of dry climates, periodic fevers may recur anywhere.

In treatment, any agent that will give tone to the trophic nerves and so prevent the periodic recession, engorgment and reaction will arrest the disease. Among the many agents that tend to this result quinine is the best known and most efficient, and should be given in full doses regardless of the presence or absence of fever, and in heroic doses it is the most efficient and harmless antipyretic. Of the coal-tar antipyretics it is generally concluded that while they usually afford a cheap triumph to the physician who can easily confirm his patient's faith and pursuade both himself and patient that the diminished heat is evidence of positive improvement, it will usually be at the expense of the strength of the patient.

When during the febrile stage the heat is excessive and long continued, especially in the robust, antifebrin or phenacetin may be desirable, but will be found little more prompt or efficient than scruple or half-drachm doses of sulph. quin. dissolved in hydrobromic acid. Phenacetin is preferable to antifebrin because it is slightly soporific and sudorific. Either may cut short a pneumonia if given immediately on the cessation of rigors and before physical signs have developed.

In typhoid fever both are always objectionable, and in that disease death has too often been victor through ill-advised antiperiodic doses of quinia. They cannot be other than harmful where there is typhoid lesion.

During the febrile stage of periodic fever the best febrifuge is one combined with some agent; that while it relieves the fever, stimulates the emunctories to remove the waste products consequent upon fever.

The following formula is as good as the best:

℞

Potass. citras .....℥ iij
Spts. niter dulc.....℥ ss
Fl.ext.verat.virid.(Norwood's), gtts. xvj
Fl. ext. gelsem.....℥ j
Aquæ. dest.....q. s...℥ ij

M. Sig.: A teaspoonful every hour during fever.

Surgeon Woodward, U. S. A., gave the name of typho-malarial to a fever quite common among the troops during the war of the Rebellion. The consensus of medical opinion does not consider it a specific fever, but a typhoid occurring in a "malarial" region — the typhoid poison acting in regions prone to periodic disease — enteric fever with the illiac lesion and a temperature influenced by alternating heat and cold. There are no facts to prove it is consequent upon a crop of specific germs, or that it is a specific type of fever. Whatever the cause of typhoid fever we would expect to find modifications in its expression in "malarial" regions. In treatment we should prevent accumulation of waste products by stimulating the excretents. Give tinct. ferri chloridi in heroic doses as an antiseptic, emulsion of turpentine pro re nat., turpentine embrocations and hot fomentations over the bowels, supporting them with flannel bandages, moderate the diarrhœa, give correctors, of which carboligni is the best, a *milk diet* and alcoholics to prevent the felt sense of exhaustion and too active destructive metamorphoses and quinine in tonic doses, and always extra doses of watching and praying to both nurse and physician.

The Gold Cure.

The *London Lancet* says: "Truly the methods adopted by some American physicians astonished us. The running of a secret cure for one's personal profit would in this country insure the erasure from the roll of any college of physicians or surgeons, university or medical society, with which he might be connected."

On the comments of the *Lancet* the *Medical Record* says: "If it would take the trouble to glance over current American literature it would learn that Dr. Keeley, if he is a doctor, does not hold any position on the roll of any medical society or institution of medical learning. It would learn also that the gold cure, so called, is generally regarded by the profession in this country as a purely commercial enterprize and a form of arrant charlatanry."

The *Journal of the American Medical Association* says: "The bi-chloride of gold scheme is the same old quackery—bold, ignorant, dogmatic—without an original feature, and the wild, hysterical claims of cure by those who have used a secret remedy is the same old story. The rapid growth of branch institutes for the treatment is purely commercial, and they are managed in nearly all instances by so-called cured men."

THE KANSAS MEDICAL JOURNAL long ago gave the only opinion that science can entertain. If any medicine, whether containing gold or silver or greenbacks, and whether put by the operator into the arm of the patient or by the hand of the patient into the pocket of the operator, can cure any disease and especially one so hydra-headed as intemperance, and where, as in drunkenness, weakened will-force lies at the foundation of the excess, by so many "dopes" and so many "shots" for so many days, then medicine is not a science, and the sharp quack who can, like Keeley, make a fortune out of his fad before the bubble bursts, enlisting in his scheme *doctors* of medicine and *doctors* of divinity, but disregarding every interest of humanity except those of his own pocket, is the successful physician.

Having made millions out of his dupes in America, Keeley has gone to "conquer other worlds," but finds the monarchies of Europe more regardful of the lives of their people than the legislators of democratic America. Germany says to him submit your medicine to chemical analysis, reveal its combination and *modus medendi* or stay out of the kingdom, and unlike the great dailies of America those of Europe have denounced the whole scheme as one of the baldest and boldest known to quackery.

What's the matter in Europe? Is the secular press less venal or has Keeley grown too confident or too miserly to pay for further advertising, or is the fraud so quickly falling into the sere and yellow leaf?

"TETANUS is an acute infectious disease which follows traumatisms, and is due to a special micro-organism—the bacillus tetani. It occurs from the fifth to the thirtieth day. The dark-skinned are more likely to take it than the white. In traumatic tetanus the proportion between the sexes is six males to one female. Hospital reports show a mortality of fifty per cent. Cold climate and altitude is detrimental to the development of the disease. Of three hundred and sixty-three cases reported during the civil war, three hundred and thirty-six died. It may occur at any age. All cases follow traumatism. Tetanus neonatorum may follow the ligation of the umbilical cord."—*Ex.*

THE Kansas Medical College has recently secured quarters in the Dennis-Ewart block on Jackson street, and the same is being fitted up for the session of 1892 and 1893.

The building is a very handsome one, is conveniently arranged, and there is an abundance of room. The prospect of quite a large addition to the class this year made it necessary to secure better and larger quarters. The session will begin September 20th, and with increased strength of the faculty, a finely-arranged college building and a large class, we predict a profitable and satisfactory year's work.

Inebriety.

Dr. Usher in the *Journal of Inebriety* says: "A new danger in our islands (Melbourne) has arisen. I speak of the ether habit. In Ireland it has attained such proportions — in the north chiefly — that the large quantity of 20,000 gallons of ether — good, bad and indifferent — are consumed yearly by the people. Some of the victims there produce a state of unconsciousness or intoxication half a dozen times daily. A man may become intoxicated for two-pence. Insanity frequently follows this habit."

In speaking of the blood of alcoholic patients he examined he says: "In some very bad subjects the change in the red blood corpuscles was so great that the individuality of the cells had become almost extinguished and lost. The change in the white blood corpuscles was not so great. Their nuclei were contracted to a surprising degree, but apart from this the cells do not evince any lessening in size, but suggests a swollen or enlarged state."

Of the cure for drunkenness he remarks: "Some attention has been called to a so-called cure used in one of the western states in North America. The alleged remedy was stated to contain gold, but on analysis none of this metal could be found in it. Several deaths have followed the treatment, and a large number of cases of insanity are reported as having resulted from the administration of the drugs used. This I investigated on the spot. Paralysis is not an uncommon sequence to the course of treatment."

Of the remedies used by the profession, aside from rest and tonic treatment for the cure of alcoholism, he mentions strychnine, paraldehyde, nitrate of strychnine, electricity, massage, gold, hyoscine, sulphonal, atropine, coca, muriate of ammonia and cocaine.

It is clear to an unbiased onlooker that the results of the treatment of drunkenness by the profession in general is not satisfactory.

Diarrhœa of Infants.

In diarrhœa of infants pure milk (and this means sterilized milk) should be the food; pure water should be given; lime water should be added to the milk. Patient should not be allowed other food when good milk can not be had. Some of the prepared foods may be used. Where there is some peculiarity rendering the milk difficult of digestion, it should be predigested, using "Fairchild's peptonizing tubes," as most of our little patients are the bottle-fed or those who are allowed the liberty of the table. The physician should teach those having charge how to cleanse the bottle to sterilize the milk, go into the details, and when these important measures are thoroughly understood and practiced, good results may confidently be expected.

The medical treatment consists in clearing the stomach and bowels of all irritating substances by calomel triturats one-tenth grain each, given at short intervals until the bowels are cleared. The time-honored dose of castor oil is good, provided the oil is first brought to the boiling point, thus rendering it unirritating and takes the gripe out of it. Then the use of bismuth in large doses, flushing the bowels with warm or cool salt water. When in pain, tincture opii deodorata may be used *very sparingly*. Not much will be gained by the use of astringents. When the patient becomes feverish, don't give antipyretics such as antifebrin, etc.; rely on bathing, on free sponging of the surface as indicated. If possible, keep the patient in a large, cool room, well ventilated, *quiet*. Mustard drafts to the stomach and over the spinal column are of benefit.

The Medical Student.

The three stages of the medical student's life as given by Dr. Henry Garven Sutton: "First, he doesn't know; second, he thinks he knows; and third, he doesn't know, but he stands on his feet like a man and gives confidence to his patients."

Diarrhœa.

Diarrhæa may be subdivided into as many kinds as there are causes. It is diarrhœa when there are frequent wasting discharges with or without pain. It is proper to presume that the patient has been indiscreet in diet, and that somewhere in the alimentary tract there is an irritant. The first indication is to clear the tract by a mild cathartic, supplemented by anemas of warm or hot salt water in the proportion of one teaspoonful of salt to one quart of water. When this has been thoroughly done, use sterilized fluid diet. Should medicine be thought necessary, sub-nitrate bismuth in twenty-grain doses, repeated every hour, may be sufficient.

Should the diarrhœa continue after the above treatment, the following will be found of service:

℞

Tinct. opii deod.....ʒ ij
Dilute nitro muriatic acid..ʒ vi
Camphor water.....ʒ j

M. Sig.: Take one-third to one drachm every two or three hours.

Following an attack, careful regulation of the diet during two or three weeks should be enjoined by the physician.

The Army Surgeon.

In the case of Private Iams at Homestead it is reported that the colonel ordered the surgeons to watch his vital action and decide when he had reached the extreme of endurance.

This case raises the question of the extent of a line officer's control over medical officers. Medical men are ministers of mercy. When they wound they wound to heal. Military medical officers are appointed after a carefully-conducted scientific examination that they may render to the nation such service as comes from their knowledge of medicine. A line officer has no control over the application of a knowledge of which he is presumably ignorant, nor can he direct it to decide when a torture he is inflicting may if continued prove fatal, and thus throw all the odium of any error of judgment on his medical officers.

We care not to discuss how much brutality military law permits to line officers. The profession of medicine never sanctions brutality in its members. When a colonel has inflicted his punishment he may turn the man over to his medical officer for healing, but he cannot make him *particeps criminis* in the punishment any more than he can direct him how he shall perform a purely professional duty. The surgeon may as well assume to direct the manouvers in the field as the colonel the conduct of a case. Their line of thought has little in common, and each has its sphere of action.

During the late war in very many regiments there was a continual jar between the surgeons and colonels because the regimental commander thought all the functions of the regiment under his control, and assumed to direct where he was blindly ignorant.

When a line officer presumes to meddle with the strictly professional duties of his medical staff there are but two courses open: resignation or disobedience, and a trial for insubordination.

Pruritis.

Menthol .....ʒ i
Alboline .....q. s. ad. ʒ i
M. Sig.: Apply on absorbent cotton.

DR. B. D. EASTMAN, superintendent of the State Insane Asylum at Topeka, will deliver a course of clinical lectures on diseases of the Mind and Nervous System in the Kansas Medical College the coming winter.

DR. T. W. PEERS has been elected to fill the chair of Physiology and Dr. W. E. McVey to fill the chair of Laryngology, Rhinology and Diseases of the Chest in the Kansas Medical College.

Hernia—Operative and Non-Operative.

Conclusions by Thos. H. Manley, of New York. Read in the section of surgery at the forty-third annual meeting of the American Medical Association:

"Although during the past fifteen years very much has been written on hernial operations—much in America, but more in Europe—so far as can be learned in the current, home and foreign medical literature, no one has made an attempt in a methodical manner in any brochure or treatise yet published to systematically describe and classify those herniæ which are operable and those which are not. For the purpose of at least in part filling in that gap this essay is offered.

"In epitomizing the subject and considering the question of treatment of hernia in a general way, it may be said, with definite certainty. . . . .

"1. That inasmuch as no operative scheme yet devised, or ever can be, will always effectually remove the causes of every species of hernia; in consequence of this, a permanent cure is out of the question in certain cases.

"2. The radical cure of hernia may be regarded as one of the most satisfactory operations in surgery. The fact that the disease often relapses constitutes no valid objection against surgical intervention, for this is commonly the case in the major part of operations performed on the human body.

"3. A radical operation for a non-strangulated hernia, which gives no serious inconvenience, is not a justifiable procedure and should not be encouraged unless there are pressing reasons for it, as the presence of a neoplastic growth in it, a prolapsed ovary or other viscus.

"4. Hernial operations should not be performed in extremes of age. In very early life there is seldom pressing necessity for them. In very advanced life the risk, immediate or remote, to life or health, involved by operation, more than compensate in the prospective benefit.

"5. Unless there are especially contra-indicating factors in given cases, inguinal hernia in women should be always treated by a radical operation, which with them is so often attended by a permanent cure.

"6. As a rule all operations on reducible or incarcerated herniæ are radically curative, though the disease commonly relapses; nevertheless, the immediate danger of strangulation has been removed and the hernia has been placed in a position to be more comfortably borne by a truss.

"7. Every operation for strangulated, inguinal hernia should always include such additional steps as will effect thereafter a complete obliteration of the inguinal canal, but permit the passage of the spermatic cord and remove the chances of a hernia again occurring.

"8. Very large, old herniæ in any of the abdominal regions are not operable, except in the event of strangulation, as their return is attended frequently with mental consequences."—*Jour. Am. Med. Association.*

ASEPSIS should be as scrupulously carried out by the accoucheur in every case of obstetrics as by the surgeon in every case of surgery.

WASHING out the uterus with chemicals is not a safe procedure.

IN a complicated case of labor success depends upon the physician not losing his head.

OBSTETRIC forceps are dangerous in the hands of the unskilled, and a knowledge of their use should be gained by practicing on the manakin and on the living subject under the direct supervision of a competent instructor. Having gained a thorough knowledge of the use and abuse of the obstetric forceps, always have them with you in the lying-in chamber.

To intelligently employ Crede's method or other manipulation to assist in the expulsion of the child in a case of confinement requires as much instruction and experience as the use of the obstetric forceps. The physician should be well up on all the means of assistance, and use them only when they are plainly indicated.

WE are not calamity howlers, but it is sometimes as proper for physicians to take some cognizance of continued discrimination against them as to stand back upon their professional dignity and take the abuse. Only very recently a medical student in the city asked a druggist to make for him a number of powders containing two very commonly-used remedies. For these he was charged twenty-five cents. A few days later, desiring some more powders and having in the meantime learned something of prescription writing, he wrote a prescription for the same compound and the same number of powders. For this he was charged forty cents. He of course objected to the price, saying he had only been charged twenty-five cents when he had no prescription, and the druggist, on learning that he had written the prescription himself, charged him twenty-five cents as before.

This is only one instance of a practice that is only too common among our druggists, who are, to a certain extent, dependent upon physicians for a large part of their business. It is to the interest of the physician to protect his patient and to see that he is not overcharged simply because he carries a recipe, in to him, illegible characters.

We have known cases where men had learned that they were charged more for filling a prescription than they were for the same compound put up by their order, and were in the habit of committing the prescription and repeating it to the druggist off-hand. If there were any excuse for an extra charge we would raise no objection, but it seems very reasonable to suppose that it is as much work and costs as much to make the mixture in one instance as the other, and the matter of recording is simply for the convenience and profit of the druggist.

The Chicago Medical Recorder, edited by Dr. Archibald Church and previously published by W. T. Keener, of Chicago, is now being published by that well-known house, the M. H. Kauffmann Med. Pub. Co.

Salicylate of Bismuth in Infantile Diarrhœas.

Mikhnevitch (*Med. Obozrenie*, No. 6, 1892), having tried the salicylate of bismuth in fifty cases of diarrhœa in infants under two years of age, reports that of the number only two died (a boy of eight months with pelvic suppuration consecutive to intractable colitis, and an infant of five months, born prematurely and exceedingly sick since its birth). The following formula is recommended:

℞

Bismuthi salicylici.....grs. xxiv
Gummi arabici.....℥ j
Sacch. albi.....℥ jss
Terendo adde aq. dest.....℥ ij
Fiat lac, tum adde aq. dest.,℥ iv

M. Sig.: The bottle to be kept in cold water or ice, and to be shaken well before use. One or two teaspoonfuls to be given from three to six times daily.

Each teaspoonful of the mixture contains about one-half grain of the salicylate, which constitutes a normal dose (three or four times daily) for an infant of from six to eight months of age. In cases of offensive diarrhœa the administration should be preceded by a dose of castor oil.—*Med. Record.*

THE American Association of Obstetricians and Gynecologists will hold its fifth annual meeting at the Lindell Hotel, St. Louis, Tuesday, Wednesday and Thursday, September 20th, 21st and 22d, 1892. The president, Dr. A. Vander Veer, of Albany, N. Y., wishes it understood that all members of the medical professions interested in the subjects discussed, or who are friends of the Association, even though not especially interested in its branch of work, are most cordially invited to attend the several sessions.

The Lindell Hotel will be the headquarters of the Association during the meeting, and has a convention hall which will provide ample accommodations for its sessions.

By order of the executive council.

WILLIAM WARREN POTTER,
Secretary.

Hæmatotherapy in Tuberculosis.

The remarkable experiments of Drs. Bertin and Picq in the treatment of pulmonary tuberculosis by the injection of goat's blood have attracted much attention. These experimenters seem to have surrounded their work with every possible precaution, and to have so far as possible avoided sources of error. They have now employed this method in 150 cases with the following results, which we quote from the *Journal D'Hygiene*:

"At the beginning of the disease the patient's condition is so much inproved that a cure may be said to be effected. In the period of softening, very great improvement is often obtained, the cough and expectoration diminishing and the strength returning even when all the classical modes of treatment have completely failed."

It seems that this method of treatment will probably have a future, and that it will not fall into disrepute so promptly as have many of its predecessors. The recent researches in bacteriology have placed the method upon a sound physiological basis, and there seems to be a good prospect that further study of this new mode of combatting one of the most terrible maladies known to man will result in establishing it upon a sound therapeutic basis.—*Bacteriological World and Modern Medicine.*

THE Mississippi Valley Medical Association will hold its eighteenth annual session at Cincinnati, Wednesday, Thursday and Friday, October 12th, 13th and 14th, 1892. An excellent program, containing the best names in the valley and covering the entire field of medicine will be presented. An address on surgery will be delivered by Dr. Hunter McGuire, of Richmond, Va., president of the American Medical Association. An address on medicine will be made by Dr. Hobart Amory Hare, professor of therapeutics and clinical medicine, Jefferson Medical College, Philadelphia. The social as well as the scientific part of the meeting will be of the highest order.

The Mississippi Valley Medical Association possesses one great advantage over similar bodies, in that its organic law is such that nothing can be discussed during the sessions save and except science. All ethical matters are referred, together with all extraordinary business, to appropriate committees—their decisions are final and are accepted without discussion. The constitution and by-laws are comprehensive and at the same time simple. Precious time is not allowed the demagogue or the medical legislator. The officers of the Pan-American Medical Congress will hold a conference at the same time and place.

CHAS. A. L. REED, M.D., *President*,
Cincinnati, Ohio.
E. S. MCKEE, M.D., *Secretary*,
Cincinnati, Ohio.

Monthly Summary of Meteorological Observations.

Observing Station, Washburn College, Topeka, Kas.
Altitude, 1,000 ft. Longitude, 95.41. Latitude, 39.3

	JULY
Mean temperature	77
Highest temperature (on 21st)	100
Lowest temperature (on 1st)	54
Normal July temperature	77
Departure from normal	0
Total rain-fall, in inches	6.37
Normal July rain-fall, in inches	4.26
Departure from the normal	2.11
Prevailing direction of wind	south
Average velocity of wind, in miles per hour	10
Highest velocity of wind, in miles per hour	40
Number of clear days	11
Number of fair days	16
Number of cloudy days	4
Number of rainy days	8
Mean barometer	30.02
Highest barometer (on 6th)	30.32
Lowest barometer (on 2d)	29.69

T. B. JENNINGS, Observer, Signal Station.

THE annual meeting of the Medical Society of the Missouri Valley will be held at Council Bluffs, Iowa, September 15th, commencing at 9 A. M. and continuing in session one day. Titles of papers must be sent prior to September 1st, so they can appear on printed program mailed members at that date.

This will be an interesting and profitable meeting.

DR. F. S. THOMAS, *Secretary.*

Report of Topeka Board of Health.

(Population 32,000.)

REPORT FOR MONTH OF JULY, 1892.

Scarlet fever	2
Diphtheria	1
Measles	1

DEATHS.

Cholera infantum	10
Uremia	3
Congestive chill	1
Consumption	3
Scarlet fever	1
Accident	1
Phthisis pulmonalis	2
Chronic diarrhœa	2
Peritonitis	2
Paralysis	2
Organic liver disease	2
Appoplexy	1
Congestion of brain	1
Entero-colitis	1
Gastro-enteritis	1
Children under 5 years of age	14
Total	47

Average, 1 to 680 of population.

L. M. CARTER, *Sanitary Sergeant.*

Aristol in Gynecology and Abdominal Surgery.

Dr. C. D. Palmer, in a communication to the Cincinnati Academy of Medicine, September 14, 1892, said: "Aristol adheres very readily to the skin or surfaces of wounds and burns. While similar in its general specific action to iodoform, it has the valuable property of forming an absolutely unirritant covering over surface upon which it is placed, under which the processes of granulation and cicatrization proceed with extraordinary rapidity. Not absorbed, it has no toxic effect. It possesses stimulating, alterative and anæsthetic properties.

"It is not my place to speak of its therapeutic powers in dermatology, except to make mention that these diseases do not unfrequently affect the external organs of generation of females. Ulcerations of various kinds—varicose, epitheliomatous, or carcinomatous, syphilitic, etc.—are especially influenced favorably by it. I use aristol in pure form, applied by insufflation, except when placed in narrow canals like the female urethra, or in the bladder or uterus. With the rectum it can be utilized as within the vagina by insufflation or by suppositories. It becomes an admirable dry dressing for some cases of chronic vaginitis, vulgar pruritus, cervical endometritis, cervical erosions and fissures, mammary fissures and syphilis, primary and secondary. It has been my habit for years in all cases of operations for trachelo-plasty, colporrhaphy and berineorrhaphy as well as for vesico and recto-vaginal fistulæ to dust some iodoform powder or to apply a dry tampon of carbolized gauze. Now I consider the aristol application as superior. I am well satisfied that aristol powder, applied over the sutured abdominal walls in all cases of ovariotomy and after all abdominal sections, is much better than any wet dressings or any dry dressings with iodoform. Crayons of aristol may likewise be profitably utilized in certain cases of general endometritis and after curettings of the uterine cavity.

"Probably the dry dressings of aristol with absorbent cotton or wool are quite useful in some cases of chronic pelvic abscesses. For the after-dressing of vaginal hysterectomy it is the remedy, as well as after mammary amputation. Aristol gauze can be made by impregnating plain gauze with an ethereal solution of aristol containing from one to two grammes of aristol per yard. Crayons for the urethra or uterus can be prepared by using at least one gramme mixed with a sufficient quantity of gelatine or gum acacia."

In a discussion following the reading of Dr. Palmer's paper, Dr. Marcus said that in a trial in a number of cases of varicose ulcers of varying degrees of severity, aristol had given him more cause for congratulation than any remedy yet used by him in that class of cases. Applied as first suggesting itself in ointment with vaseline as a base, the result was nil. He then adopted the follow-

ing plan: The ulcers were cleaned and all scales removed, and moisture dried with absorbent pads of cotton, then dusting the aristol freely over the entire surface, placing over all a thin layer of absorbent cotton and penciling the entire dressing with elastic collodion. The result in most cases was gratifying, and confirmed for the speaker a half-formed opinion that greases and salves were not conductive of healing in varicose ulcers.

Dr. Palmer said he was pleased at the lively interest his paper had provoked. He would now refer to but a few points raised in the discussion: Aristol in his experience had proved itself to be one of the best remedies we possess for varicose ulcerations. It will not cure the varicosities of the veins, but it rapidly heals the varicose ulcerations resulting from the varicose veins. He had made the applications very much as suggested by Dr. Marcus, applying freely the dry powders of aristol twice daily, and adjusting over this application a pad of absorbent cotton, retained by a well-fitting bandage.—*Cincinnati Lancet Clinic*, October 3, 1891.

THE following formulæ produce sightly pharmacal products of ascertained value in practice:

CATARRHAL AFFECTIONS.—An excellent cleansing and disinfecting solution for free use in the nasal cavities, by means of the spray apparatus, douche or syringe is prepared as follows:

℞

Acidi boracici	ʒ i
Sodii boras	ʒ i
Sodii chloridi	ʒ ss
Listerine	ʒ ii
Aquæ puræ	ʒ vi

M.

CHRONIC RHINITIS.—In the remedial treatment, the following has proven of service, used with the atomizer twice or thrice daily. If used as a douche, dilute with two or three parts water. Note: The iodine is decolorized in preparation, a clear solution of light amber color resulting:

℞

Sodii boras	ʒ ss
Sodii bicarb	ʒ i
Aquæ puræ	ʒ ii

Dissolve and add

Acid carbol	grs. xv
Tr. iodi	ʒ iii
Listerine	q. s. ft. ʒ vi

M.

PURITUS ANI AND VULVÆ.—The following formula will afford relief from the itching and irritation—to be applied locally:

℞

Sodii hyposulphis	ʒ i
Acid carbol	ʒ ss
Glycerine	ʒ i
Listerine	ʒ iii

M.

PURITUS.—Another formula, which has proven signally useful in some cases, is:

℞

Sodii salicylate	ʒ ii
Glycerine	
Listerine	aa ʒ vii

M.

ABRASIONS — CUTANEOUS DISORDERS.—This antiseptic adhesive ointment protects the surface of the wound and is of especial service in dressing wounds of the face, and valuable in cutaneous eruption, excoriation and ulceration:

℞

Zinci oxidi	grs. v
Zinci chloridi	grs. xx
Gelatine	ʒ vi
Listerine	ʒ vii

M.

The gelatine to be dissolved in the listerine by aid of gentle heat.

THE BOVININE CO. has leased the premises No. 65 South Fifth avenue, where it will be pleased to see its friends and customers personally, or receive their orders for bovinine by mail.

IN Dr. Stewart's discussion (page 68[illegible] August number) "evidently one of anthrax" should read "evidently not one of anthrax."